

Seed upgrade

MadMax mini workshop
Paris, 10.05.2017



MAX-PLANCK-GESELLSCHAFT



Max-Planck-Institut für Physik
(Werner-Heisenberg-Institut)

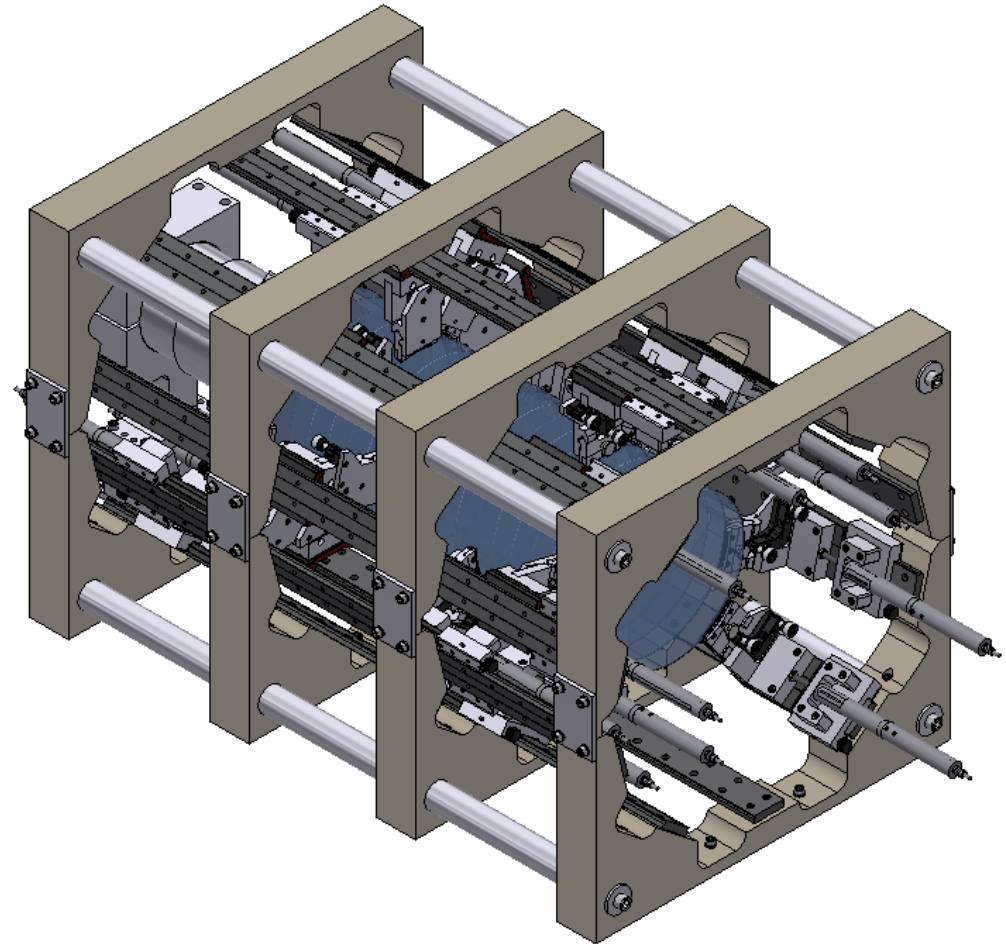
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Institute: Max-Planck-Institute for Physics, Munich/Germany

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Overview

- The whole setup
- Positioning unit
- Plate holder
- Summary and next steps



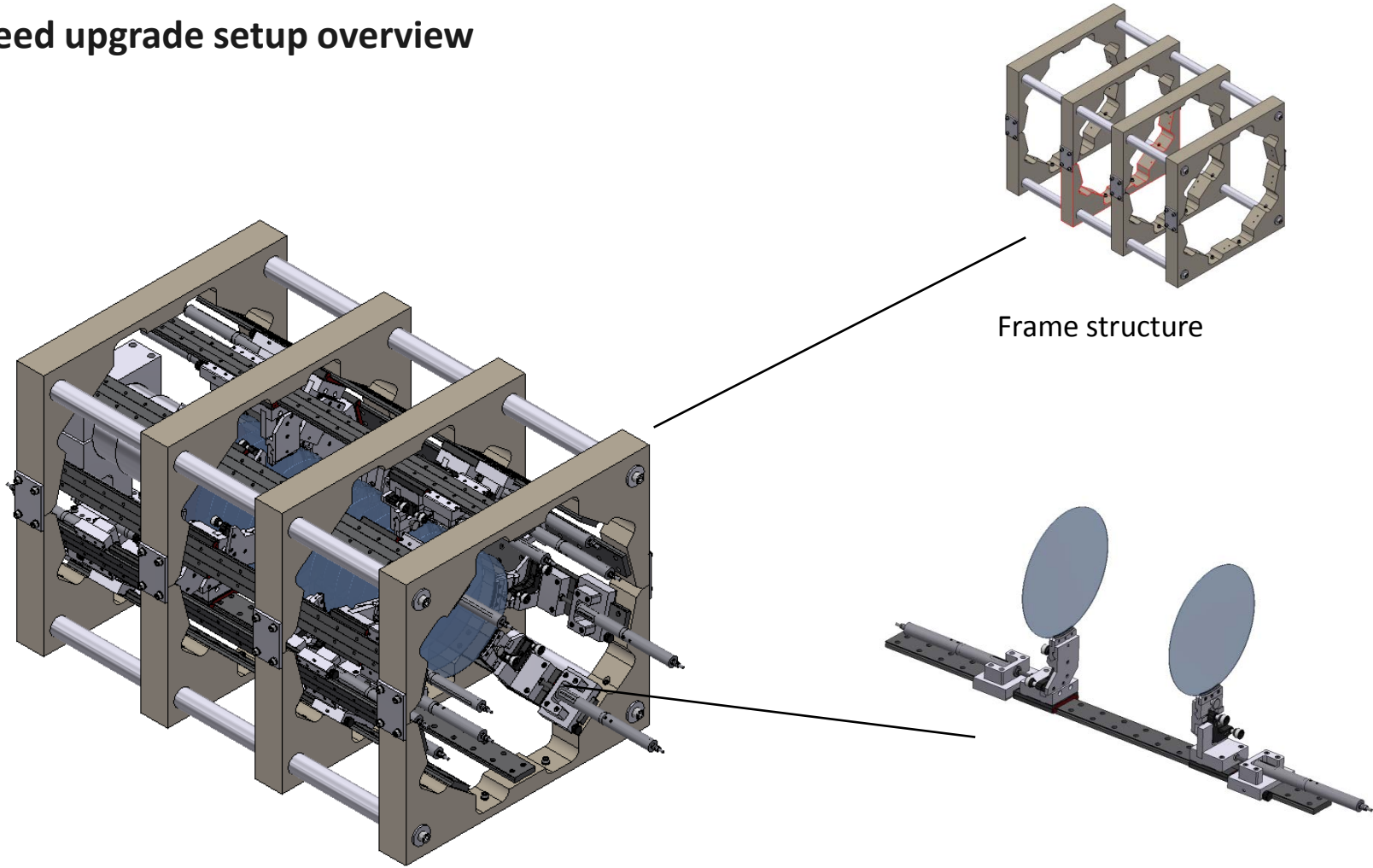
Notice:

The complete current state of the design has been done by my MPI-colleague: Holger Wetteskind

From now on I will be responsible for the mechanical design and development of the seed setup!

The whole setup

- Seed upgrade setup overview

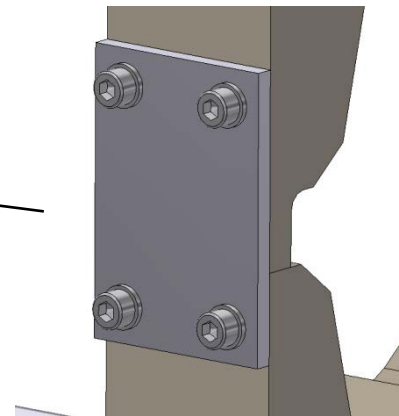
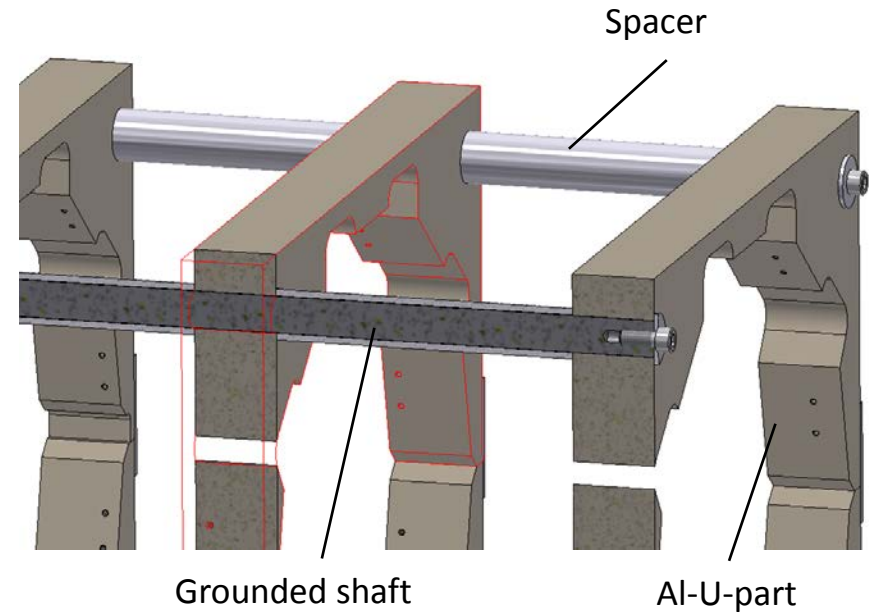
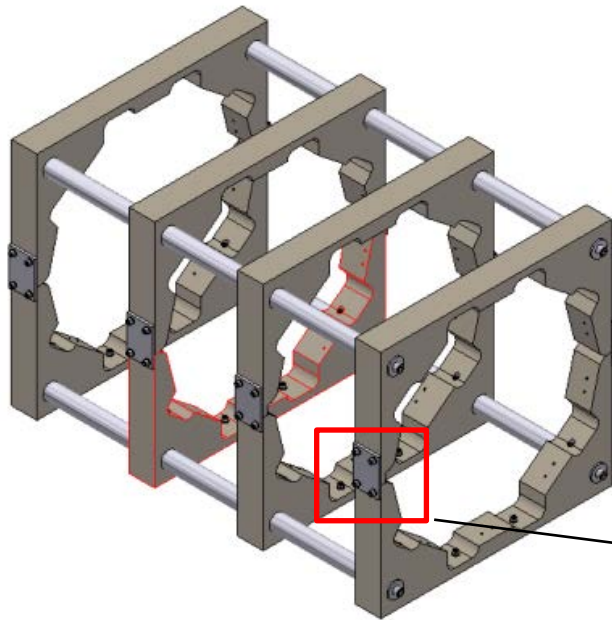


Frame structure

Positioning unit (10x)
with saphir-discs

Frame structure

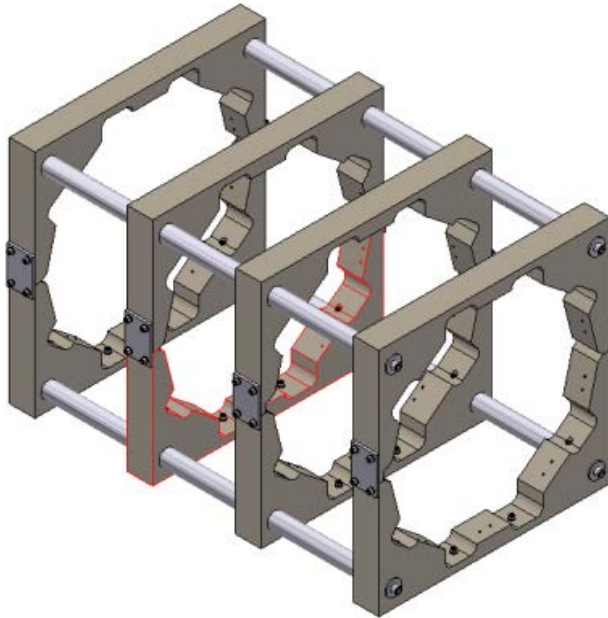
- The frame holds the whole structure



Dividable in two halves

Frame structure

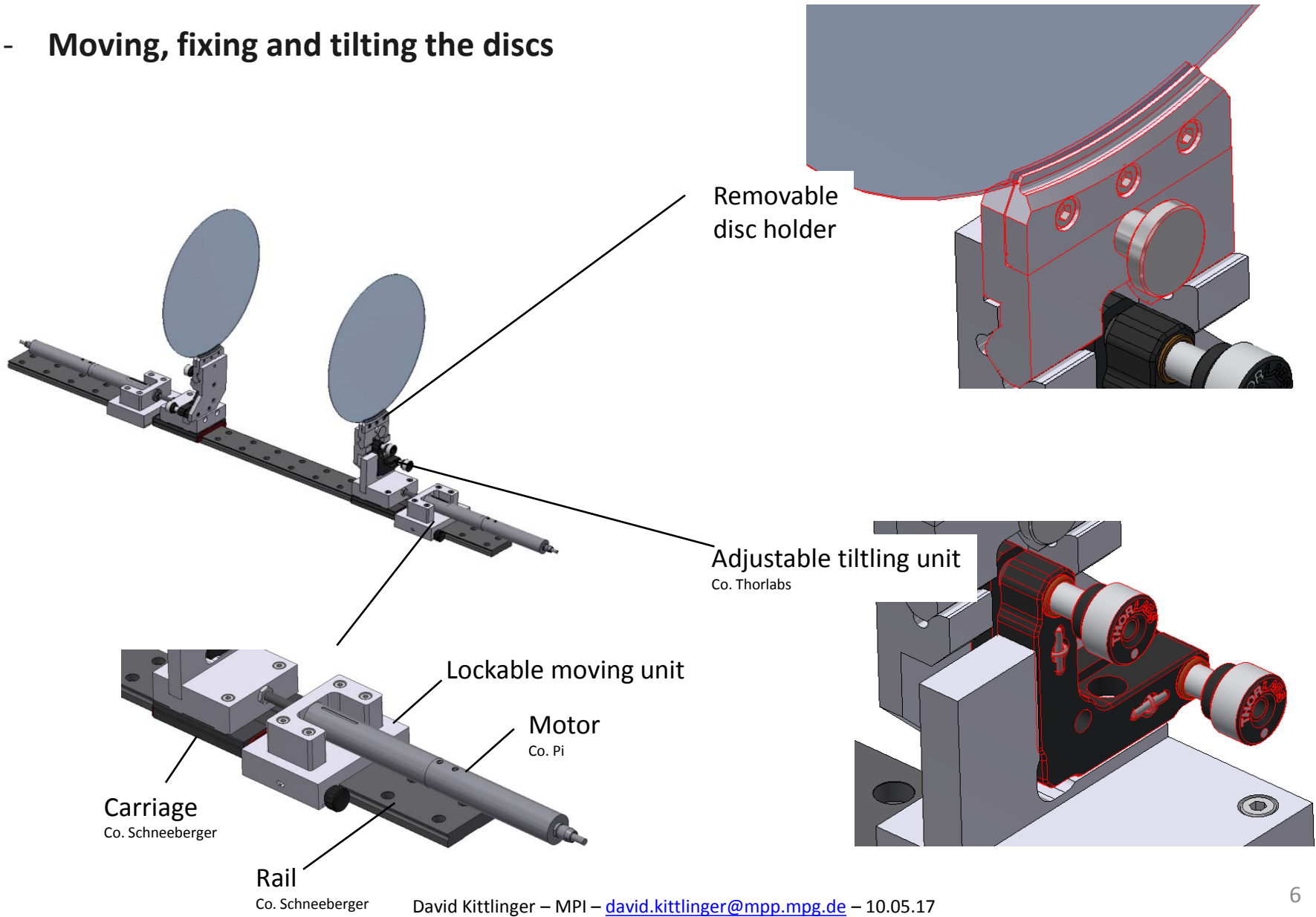
- The frame holds the whole structure



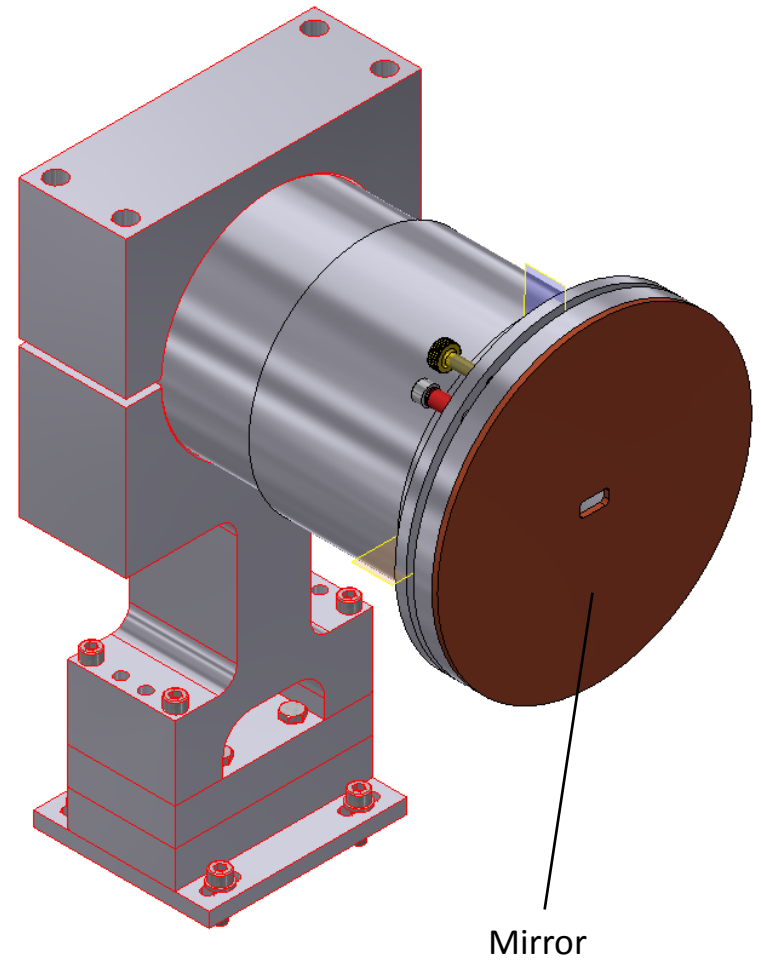
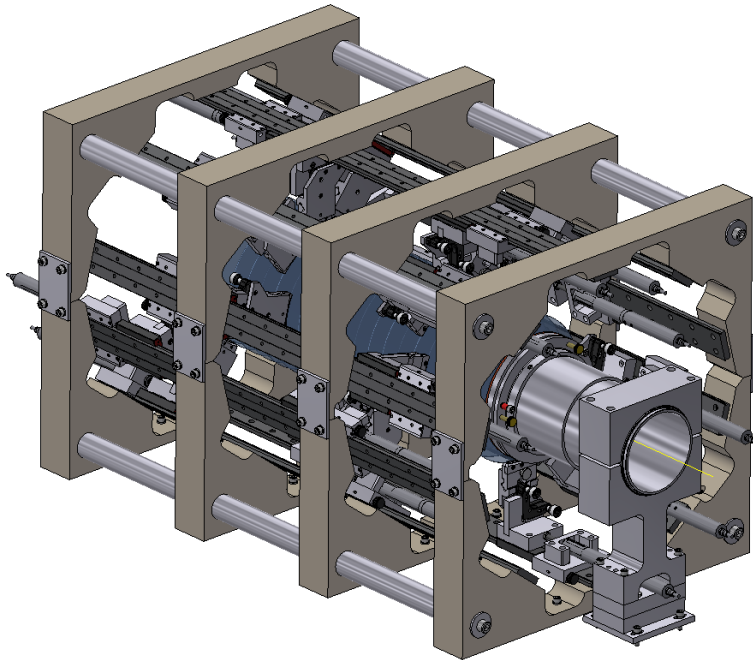
Freshly manufactured parts from the MPI-workshop

Positioning unit

- Moving, fixing and tilting the discs



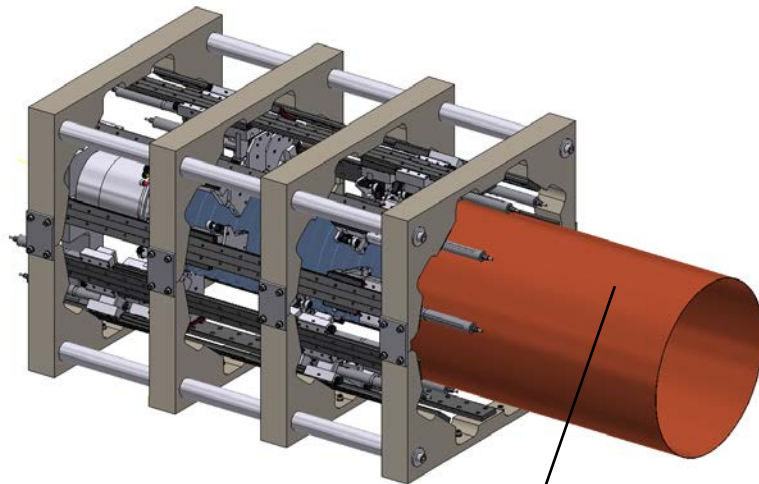
Mirror



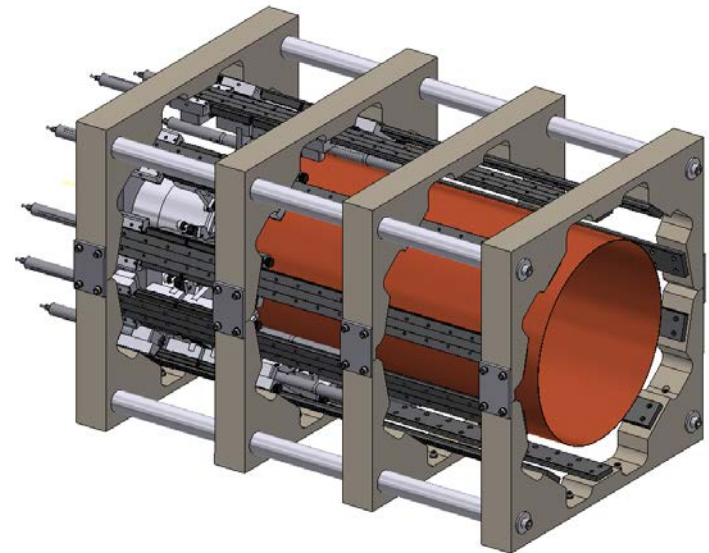
Copper cylinder

- For shielding

Disc gap: 25mm



Disc gap: 1.3mm



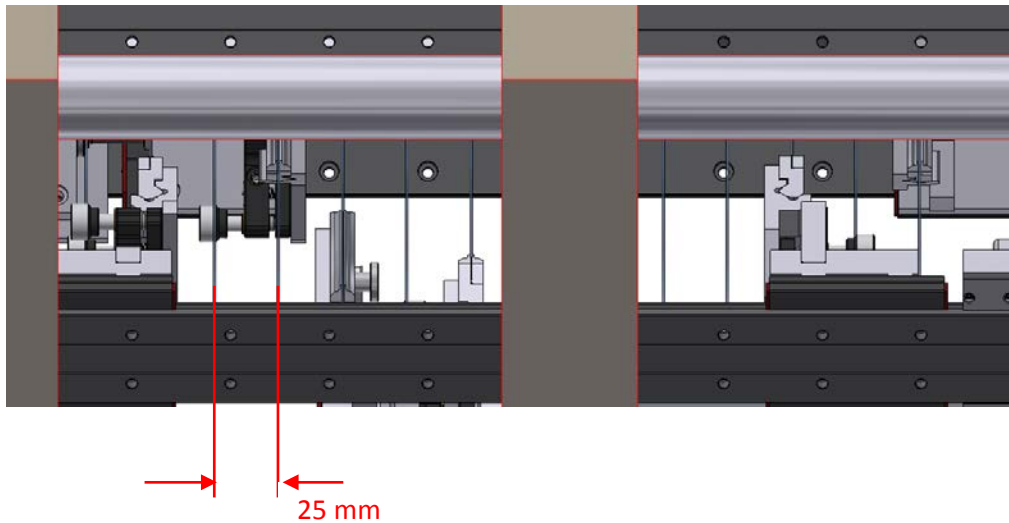
Copper cylinder

=> next: design of the cylinder support

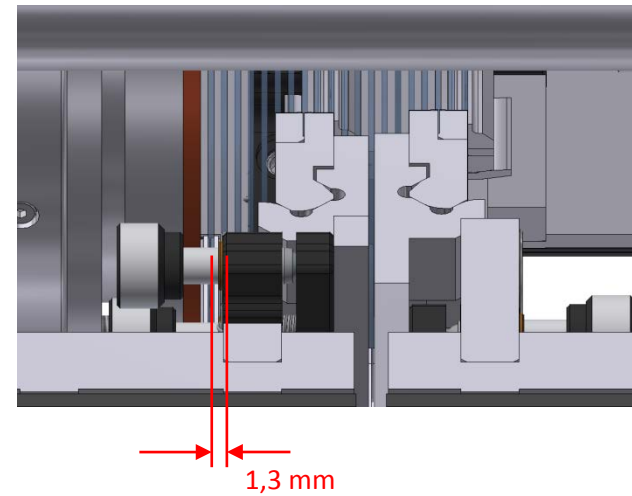
Disc distance

- **Moveable disc gap between 1.3 – 25mm**

Disc gap: 25mm



Disc gap: 1.3mm



Rough adjustment by unlocking the moving unit and shift by hand
Fine adjustment by motor (moving unit is locked!)

=> next: integration of an movable limit switch

Next steps

- Integrate the support for the copper cylinder
- Integrate the a moving limit switch between the plates

